commodore
COMPUTER CLUB
NEWSLETTER

Hello!
by Betsy Byrne

Welcome to the Commodore Computer Club. This is the place to find all the latest hardware, software, information and news. All the things that go to make up a good club meeting will greet you every month at your mailbox. What things? NINE THOUSAND (!) people have already sent in $10 and the application form from the VIC-20 CLUB flyer that was mailed out to registered VIC owners in May. This makes us the largest Commodore user club in the USA.

Let me introduce myself: my name is Betsy Byrne, and I am your newsletter editor. I will be writing and editing the newsletter section of this publication, with lots of help from all of you—I hope! I am president and co-founder (with my husband Danny) of the New Mexico Commodore Users Group. My name may be familiar to POWER/PLAY readers as an associate editor of that magazine, editing "Kid's Corner" a department by, for, and about the younger generation of Commodore users. I also do freelance articles and reviews for other computer magazines and raise four children, a flock of chickens and ducks—in my spare time.

I feel very strongly that every Commodore owner can benefit from membership in a Commodore user group or club. In fact, it has been this belief that motivated most of the computer related projects I'm presently involved with. When Neil Harris of Commodore offered me a chance to work on a NATIONAL USER GROUP NEWSLETTER, it was a dream come true. Before I tell you

about some of the things we have planned for our newsletter, I must say as *your* editor, that I want to help produce a publication tailored to fit *YOUR* needs. Please feel free to write me, or leave me a message on CompuServe (my user number is 70007,573), with any suggestions or comments that you might have. When I say that this newsletter will provide everything you would find at a user club meeting (with the possible exception of coffee and doughnuts), I am not exaggerating. In this issue we have:

Tips and Hints: Peggy Herrington on VIC-20 music.
The Tax Man and the Prodigal Hacker: David Palmer—one user's attempt to decipher IRS tax rules as they apply to computers.
Computer Talk: Letters Section, where members talk to each other about all possible Commodore computing subjects.
Items for Sale: Catalog section.
Telecommunications Talk: Our Own CompuServe Special Interest Group!
In future issues you can expect to see:
Dear Jim: Commodore expert Jim Butterfield will answer letters and discuss his opinions on any facet of Commodore computing. Any member can write Jim and solicit his opinion or advice on anything Commodore. We will publish the most interesting and most representative, along with Jim's answer. Send your letter to:

Jim Butterfield
% Betsy Byrne
6212 Karlson NE
Albuquerque, NM 87113
Public Domain Software: We are

planning a series of articles spotlighting Commodore's great collection of public domain software. We will also have programs available for downloading from our section on CompuServe.
Technical Tips: Short member written articles about fascinating technical subjects. I'm depending on all of our knowledgeable members to contribute to this section!

There are plenty of slick computer magazines out there, in fact the people at Commodore publish two of the best, *Commodore* and *Power/Play*. This newsletter is not designed to compete with them or to duplicate the kinds of articles and programs that you might find in the other magazines. It's meant to be a newsletter, full of user-to-user dialog on a friendly, one to one basis. I personally hope that it can serve as the nucleus of the largest, strongest computer organization ever.

Yes, a part of each issue will consist of a catalog of Commodore products. Many user publications accept advertising; some of them *depend* on it to keep dues at an affordable rate and still publish a reasonable amount of pages each month. The Toronto Pet Users Group's "TORPET", and the New Mexico Commodore Users Group's "ON-LINE" are two examples. What could make better sense than for Commodore itself to be the advertiser that makes a Commodore National User Group publication possible! From a more personal standpoint, I welcome the opportunity to be able to purchase absolutely everything Commodore produces. Eventually every spare part and chip that they make will be listed in this catalog. In this issue

the emphasis is mainly on VIC-20 products, since the demand is far exceeding the supply of Commodore 64 items. C/64 products will be offered as they become available.

"What about us?" local user groups are asking right about now. Neil and I are busy devising ways to include local user organizations in this club even as you read this. I would like to invite spokespeople for local groups to contact me with ideas and suggestions about participation.

Well that's about it for this issue, hope you like what's happening here. If you're as excited about all this as I am, drop me a line or write to fellow members in the Letters Section. Until next month—Happy Commodore computing!

Peggy's Music Pointers

Dear Betsy,

I think this idea of a National Users Group is terrific and I'm looking forward to making some new friends from far-off places here in the newsletter.

I'm a musician and use my VIC primarily for—you guessed it—its musical capabilities (and word processing, too) and I'd like very much to get a dialog going. I don't find a lot of information about VIC music in magazines and/or books since the C-64 with its SID chip came along and wowed the computer music field, but I, personally, get lots of GOOD sounds from my little VIC.

So I'm attaching to this letter a "CODA" (well, maybe it's actually the main theme) of miscellaneous stuff I've picked up here and there or stumbled into on my own, about making music on the VIC. I offer it as a starting point for further development by other VIC musicians and anyone else who cares

to make comment.

Incidently, my CompuServe User ID Number is 74475,160, and I would like very much to hear from other interested folks on this subject. Leave a message in the National Users Group Section on the VIC SIG.

Until next time,
Sincerely,

Peggy Herrington
1032 Forrester St. NW
Albuquerque, NM 87102

1. One of the first things I did when I got my VIC was hook the audio output into my stereo system. The improvement in sound quality was dramatic. Your Commodore dealer or an electronic parts store can do it for you, or, if you can solder, they can tell you how to do it yourself—it's easy!

2. Because I have an unexpanded VIC, I always crunch my music programs. I use abbreviations and never leave any spaces in program lines. This gives me more RAM for music data. But when I first write music tones into data statements I don't crunch: I use one data line (more if needed) for each measure. That makes it easier to find mistakes (and I always make a couple). I listen to what will fit in and if I can't get all the music in due to memory limitations, I then go back and crunch the data by putting as many numbers on each data line as will fit—this can be done with cursor controls—and then I continue adding more data lines in the space I've made by crunching.

Another debugging trick (to find a sour note or wrong duration) is to PRINT the data as the program READs it. This will slow the tempo—an added benefit when you're debugging—and if your mistake is the kind that stops the program (with an error message like OUT OF RANGE) it will print the last good piece of data before the program stops: the wrong one is the next one in the data statement. Fix it and delete the PRINT statement. I use REM rather than

deleting program lines when I want to turn things off, for instance, when I want to hear one voice of the three that are sounding. I cursor up and insert REM just before the POKE command for the voice(s) I don't want to hear. When I'm through, I delete the REM. That way I don't have to retype the line.

3. All I ever read about the VIC Super Expander is how great it is for graphics (and it is) but I think it's one of the best things on the market for VIC music too. The music routines are all in machine language which means the sound doesn't have to be played by a BASIC loop. Not only can the tempo be much faster this way, it's EVEN. And the Super Expander routines are quick enough that I can print lyrics to the screen and change them in between verses…voila! a sing-along! Harmony is (can you believe it?) done automatically, all I do is put in the relatively simple notation for tempo, octave, notes, etc. Nothing has to be POKEd. Plus, the 3K expansion lets the VIC and my family sing longer.

4. If you have some memory expansion for your VIC (I don't, sigh) you can write a program to build an array from your music data statements. When the program is RUN, you'll have to wait a minute or two while the array is created but the tempo of the music will then be more rhythmic and can be lots faster because the data is much more accessible. (This is how harmony is usually done on the C-64 so take a look at that if you're not up on arrays.)

5. When I add sound to a game or other non-musical program I NEVER use just one voice. It takes a negligible amount of memory to POKE the same musical data to two or three voices and the pay-off is a much richer, fuller sound.

6. As you know, the three musical voices on the VIC overlap each other in range. If you can read music (even a little) you might consider making a chart on graph paper by drawing the bass and treble clefs and then putting the three voices separately on that staff.

That will show, graphically and musically, how they overlap. Inside each note, write the number needed to POKE that tone into the appropriate voice, and under the note, write the number for sharping that tone. On my chart, I added another string of notes and labeled them with Super Expander notation. This chart makes transcribing sheet music into data statements much easier for me and I rarely get half-way through a song any more only to find that I need a tone which is out of the range of that particular voice.

7. The volume control can be used for more than adjusting the volume: it can alter the sound envelope. That's what makes the difference in the sound of, say middle C, on a horn and a human voice. Since there's only one volume control on the VIC, it will work with only one sound at a time—you can't do harmony with this technique, although you can use more than one voice to sound the tone being manipulated. Try this:

```
vic music tips for NCC
   newsletter.
5 v=36878:s2=36875:s3=
   36876:dimn(14)
10forx=0to14:readn(x)
20pokes2,n(x):pokes3,n(x)
30fora=0to15step.1:pokev,
   a:next
40fors=0to60:next
50ford=15to0step-.25:
   pokev,d:next:next
60pokes2,0:pokes3,0:
   pokev,0:end
100data225,228,231,232,
   235,237,239,240
110data239,237,235,232,
   231,228,225
```

Unaltered VIC sound has a fast attack (A) and a fast decay (D) but the program determines the sustain (S). Play with the STEP values in the attack and decay (lines 20 and 50) and you'll get an idea of how much the attack and decay have to do with the nature of a sound.

The Taxman and The Prodigal Hacker
by David Palmer

Many computer users bought their computers with thoughts of tax breaks dancing around in their heads. By comparing notes and references with other users I came up with the following. Since tax laws are continually reinterpreted, and since I am only an amateur taxpayer, this guidance should only be thought of as a starting point, not as your "final defense".

Many Happy Returns

The VIC or 64 are reasonably priced but no keyboard is an island. Soon software, books, magazines, disks, modem (not to mention phone bill), and monitor have far exceeded the original cost. About this time of year, while deciding what computer Christmas gifts to ask for, one occasionally asks "is any of this tax deductible?"

Many people have claimed a percentage of their home computer expenses as a tax deduction. Over the years, this has led to IRS rules of thumb, although there is no IRS bulletin we know of that covers this subject.

RULE: Deducting the cost of your computer, books, magazines, and software is allowable if used to produce income (investment management, teaching computer classes, or business aid) or if used to further your professional education.

CLARIFICATIONS: The percentage for personal use cannot be deducted:

1. If less than half the computer time is used to produce income or assist professional education (then don't bother.)

2. If you use the computer in your investments it must be in an 'active'

sense, not just a record keeping exercise. For example, your program might give buy and sell recommendations. It is also important that the income you produce justifies the expense you intend to deduct. A prudent business type does not try to deduct $500 in computer expenses based on managing 3 EE bonds.

3. Hardware is typically deducted at 20% for five years (the legal life of a computer). Software is deducted the year it is bought.

4. "To further your professional education" means that the computer expense supplied you with some measurable increase in microcomputer or BASIC talents that allowed you to do a better job in your current position and did not automatically entitle you to promotion. For example, a school teacher may need to learn about home computers in order to educate future students, or an engineer may find that learning BASIC programming skills at home is the only way to keep abreast of the new grads. This deduction usually takes place in one lump for the year the anticipated education is completed. You can go on learning but you only deduct the expense after the first major experience.

5. If you use the short form or take a standard deduction then these approaches do not apply. However if you use your computer or software to directly earn money (teaching computer courses or selling software) you can always subtract computer expenses directly from income if, in fact, the expenses were necessary to achieve the income. That is, even if the income is not necessarily a main job, it is a sideline but not a formal business, you can certainly balance the income against the incurred expense.

If you have anything to add from your experiences please send a note to the editor. Understanding the tax breaks of computer use will help us all spread our money further.

Computer Club Overview

by Neil Harris

Hello everyone. As publisher of our magazines (*Commodore* and *Power/Play*) and author of many of our VIC and 64 manuals, my job is making it as easy as possible for you to enjoy your computers. That's why I jumped at the chance to work with our national group, the Commodore Computer Club.

Local user groups have been appearing and growing and clamoring for help from us. And for every computer owner in a group, there are many more who don't happen to have one where they live.

I'm a great believer in user groups. When I learned to program (back in the dark ages before micros), my school had a small number of people interested in programming and computer fun. By banding together into an organization we were able to help each other in many ways. We held classes before school to teach introductory BASIC (that's how I learned). There was always someone to turn to when a SYNTAX ERROR reared its ugly head.

This club will, through this newsletter and other services, provide the benefits of a strong user organization. Trying to be scientific, I came up with this list of benefits:

1. Communication .. sharing ideas and information

2. Learning .... getting problems solved and questions answered

3. Expanding systems . getting advice on what and where to buy

4. Socializing .... getting to know people who share a common interest

5. Stimulating ...... offering new ideas for using your system

6. Experimentation .. getting to know what other people's computers do

7. Boosting ego ..... the opportunity to demonstrate knowledge & skill

Some of these benefits may sound more important than others, but I think they're all necessary to help you get the most from your membership and your computer.

What are we doing to put all these into effect? Well, there are two parts to a typical user group meeting: a formal program and the informal conversations between members.

The formal part of the meeting is represented by this newsletter. Each month you can share ideas with each other through our extensive letter column. You will learn through special features ike "Ask Jim Butterfield". We plan contests for programming ability and creativity. Regular features will profile selected Commodore and other products.

The informal part of the meeting is where you talk to each other directly. To achieve this, we've set aside a special area on CompuServe which is accessible to members only. All you need is a computer with a modem. Barbara Karpinski's article in this issue explains how to use this service from your home. On-line conferences, a bulletin-board, and other services for members will appear during the next few months.

The last piece of the club covers product services. We've expanded the line available considerably since the first catalog. You will be able to purchase almost any product made by Commodore, including replacement parts, as well as other products of interest to Commodore owners.

In order to facilitate the demand for products through the club we've streamlined the whole operation. All club order processing is being performed in Commodore's national headquarters in West Chester, Pennsylvania. We promise to send your order within three weeks of receiving it. Any portion of your order that we can't ship will be refunded. And remember, you get a 15-day money-back guarantee on all products.
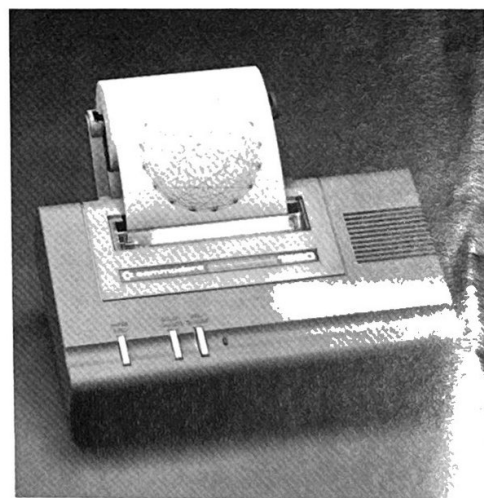
Next issue should include a complete revised product and price list, along with your membership cards. For now, you can get in on a special VIC 20 software offer. Two cartridge games for the price of one, just see the enclosed letter.

Thank you all for joining with us in this very exciting project.

Product Profile:
Commodore 1520 Printer/Plotter

This is one of the most misunderstood products Commodore makes. People think of it solely as a plotter, while its capabilities as a *printer* should be very popular with people looking for a very inexpensive way to list programs and produce other hard-copy.

In fact, the quality of the text created by the 1520 is far superior to that produced by dot-matrix printers. That's because the plotter mechanism actually draws each character line by line.

The 1520 moves a set of pens back and forth along the line while the paper moves up and down. The combination allows for solid lines in any direction. Think of it as a computer-controlled "Etch-a-Sketch" with accuracy to 2/10 of a millimeter (!) and four colors.

The 1520 is pre-programmed with the Commodore character set. For reversed characters, the plotter underlines the letter. Program listings are easily understandable. And the quality of the text is super!

You can select any of the four colors (red, green, blue, and black) under the control of a program or by pressing a button on the printer's front panel. The 1520 will withdraw that pen, rotate the desired one into place, and return the point to precisely the position it was located before.

The characters can be displayed in a variety of sizes, 10, 20, 40, or 80 characters per line. Since each line is only four inches wide (printed on wide calculator rolls), small characters aren't too easy to read—but they do print fast!

Other features include sideways letters, dashed lines with 15 different sized dashers, relative or absolute positioning, and more.
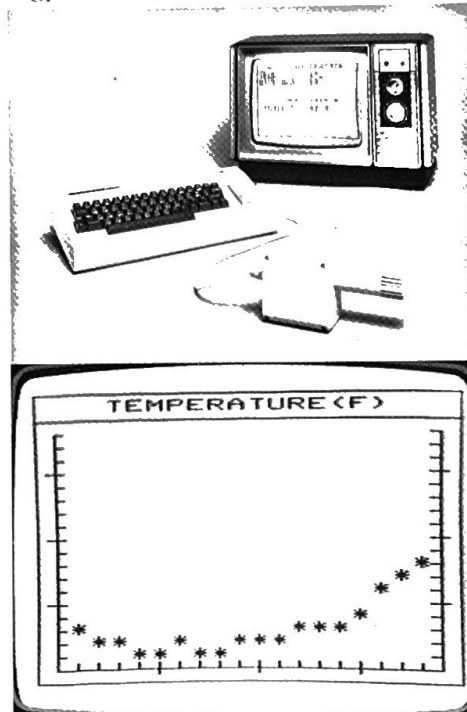
ORDER#		
C1520	Printer/Plotter for VIC or 64	$182.95
C1520P	Extra rolls of paper	$ 13.95
C15201	Extra pens (4 assorted)	$ 6.00

Product Profile:
Home Automatic Weather Station

This unique product works exclusively with the VIC 20 and Commodore 64. It is the first device that hooks your computer to the real world through a variety of scientific-quality sensors. Perfect for computer learning or practical applications like gardening, home energy control, or weather forecasting.

TEMPERATURE (F)

The package includes the sensor unit, a 15-foot cable for your Commodore computer, an indoor/outdoor mounting bracket, software on cassette or diskette and a comprehensive manual. The software lets you make predictions and collect and store data to produce graphs and printouts. The manual has been designed to serve as an effective course curriculum and teaching guide for weather, meteorology and science classes.

You can easily customize the programs for your own use. Use the HAWS to measure the temperatures in your house to determine the best use of your heating and air conditioning systems. Or invent your own uses.

This precision instrument comes from Vaisala, an esteemed maker of scientific and meteorological equipment. The sensors in the Home Automatic Weather Station are accurate to 4/10 of a degree, 3% relative humidity, and .5 mil-libars of atmospheric pressure.

ORDER#		
HAWS-TV	Weather Station with VIC tape	$204.95
HAWS-DV	Same with VIC disk	$204.95
HAWS-TS	Same with Commodore 64 tape	$204.95
HAWS-DS	Same with 64 diskette	$204.95

Product Profile:
Four-Book Pack For The VIC 20

Anyone who shops for computer books knows how expensive they are. That's why Commodore has developed this exclusive four-book library for VIC 20 owners. By packaging all these excellent Hayden books together, we can keep the cost reasonable.

The books included are *VIC Revealed, VIC Graphics,* and *VIC Games,* all by Nick Hampshire, along with *Stimulating Simulations for the VIC* by C.W. Engel. Together they are a valuable addition to the *Programmer's Reference Guide* on your computer bookshelf.

VIC Revealed does a very thorough job describing what each chip inside the VIC does and how you can program them yourself.

It includes an invaluble chapter on the BASIC ROMs, describing how to use the built-in BASIC routines our programs.

VIC Graphics will be a er Expander owners. A mu o-gram examples takes you g geometric and trig shape. rotations. Perfect for the the mathematician.

VIC Games contains recreational programs in and your software li gram line descriptions you hackers.

Stimulating Simulations interesting simulations ready for typing in. Docu

cludes flowcharts and complete programming descriptions. Can you win at Art Auction, put out the Forest Fire or survive the Devil's Dungeon?
ORDER# VT115   Four-Book Pack . $22.95

National Commodore Users Club Has Gone Online!

by Barbara Karpinski

We have set aside part of the VIC 20 Bulletin Board to be used by club members ONLY. The VIC 20 Bulletin Board (BB) is located in the Commodore Information Network (CIN) on CompuServe on page CBM-962. Section #9 of this BB—along with its corresponding database—will be open for use by the National Commodore User Club. Accessing section #9 (National CBM club) will allow you to take advantage of the following features.
You can:

1. Read and leave messages to Commodore and to other club members.
2. Attend and participate in online scheduled conferences.

3. Access and share programs, files, and reviews located in your database.
4. Receive specialized assistance from Betsy Byrne who will be your own SYSOP (SYStem OPerator).
5. Plus a whole lot more.

Because the National CBM Club is open only to club members, you must leave a message addressed to myself so that I can set the appropriate "flag" to allow your user number access. Once I add your number, you can start using the board. Following is a sample message to give you an idea of the message format (Capital letters will signify what the system will print and small letters will signify what is typed by a user).
FUNCTION: 1 (hit return key)
TO: Barbara Karpinski 70007,533 (or CBM SYSOP) (hit return key)
SUBJECT: club membership
barb,(return key)
My name is Mary Smith (user number). I am a member of the National (return key) CBM Club and I would like to be added to the National CBM Club (return key) membership list. (hit return key) (return key)
(the return key at beginning of a new line signifies the end of your message)
LEAVE:s0(hit return key)
(s (store) message in 0 section)

I will then receive this message and add your name to the National Computer Club membership list.

For those of you who are not familiar

with CompuServe or the Commodore Information Network, here is a short summary of where the National CBM club is located and how to get to it.

1. You must hookup to the CompuServe Information Service (CIS) by doing the following:
   a. Turn your VIC or C-64 off.
   b. Insert your VICMODEM or AUTOMODEM in computer's user port.
   c. Turn computer on, then load and run your terminal software.
   d. Dial your local CompuServe access number.
   e. Type in your unique user number (mailbox) and password (key.)

2. Once you have logged on, you will be greeted with CompuServe's Main menu. At the "!" prompt you can type GO CBM962 (hit return key). This will take you to the VIC 20 Bulletin Board. (You can also get to this BB by following the menu structure, but this is a longer process.)

3. The VIC 20 BB is composed of ten sections—each with its own database. Section #9 is reserved for the National CBM Club. To gain access to this area, first leave a message in section 0. When your "flag" has been set, you can access this area by typing ss7 at the FUNCTION MENU prompt. When you are done accessing section 7 and wish to read other sections, type ssall at the FUNCTION SECTION 7: menu prompt.